

Washington Aqueduct

<http://washingtonaqueduct.nab.usace.army.mil>

Description	FY 2003 Actual	FY 2004 Approved	FY 2005 Proposed	% Change from FY 2004
Operating Budget	\$0	\$55,553,000	\$46,872,000	-15.6

The mission of the Washington Aqueduct is to collect, purify, and pump an adequate supply of potable water for the District of Columbia, Arlington County, and the city of Falls Church, Virginia.

The Washington Aqueduct, which is managed by the U.S. Army Corps of Engineers, owns and operates intake facilities on the Potomac River in Great Falls and Little Falls, Maryland. The Aqueduct also owns and operates two 12-mile gravity conduit systems with a combined 200 million gallon per day (mgd) capacity, a 450-mgd raw water pumping station; a 480-mgd finished water pumping station; two major treatment plants with 350-mgd capacity, three booster-pumping stations, seven finished storage reservoirs, and many large diameter transmission mains.

The Aqueduct is a division of the U.S. Army Corps of Engineers (Corps) and does not receive appropriated funding from the District. As a federal entity, the Aqueduct needs Congress to authorize the agency's operations. The agency submits a budget to the District of Columbia, in accordance with legislation, to obtain this authority.

The District of Columbia Water and Sewer Authority (WASA) funds the District's portion of the costs of the Washington Aqueduct. WASA purchases potable water and makes pay-

ments to the Aqueduct based on the number of gallons provided. The Aqueduct charges a rate based on water sale agreements with the District of Columbia and northern Virginia (which includes Arlington County, and the City of Falls Church). These jurisdictions are responsible for water distribution.

The agency plans to fulfill its mission by achieving the following strategic result goals:

- Provide an adequate supply of potable water.
- Make water available to consumers at an equitable, economical rate.
- Protect the water and consumers from microbial, chemical and other risks.

Recent Water Quality Issues

The provisions on the Safe Drinking Water Act and its associated regulations are the basis for all operations concerning the production, storage, and transmission of the drinking water produced and sold by the Washington Aqueduct to its wholesale customers. Water is provided from the Potomac River and treated at the aqueduct's Dalecarlia and McMillan treatment plants in the District.

Funding by Source

Table LB0-1 shows the source(s) of funding for the Washington Aqueduct.

Table LB0-1

FY 2005 Proposed Operating Budget, by Revenue Type

(dollars in thousands)

Appropriated Fund	Actual FY 2002	Actual FY 2003	Approved FY 2004	Proposed FY 2005	Change from FY 2004	Percent Change
Special Purpose Revenue Fund	0	0	55,553	46,872	-8,681	-15.6
Total for General Fund	0	0	55,553	46,872	-8,681	-15.6
Gross Funds	0	0	55,553	46,872	-8,681	-15.6

Expenditures by Comptroller Source Group

Table LB0-2 shows the FY 2005 proposed budget for the agency at the Comptroller Source Group level (Object Class level).

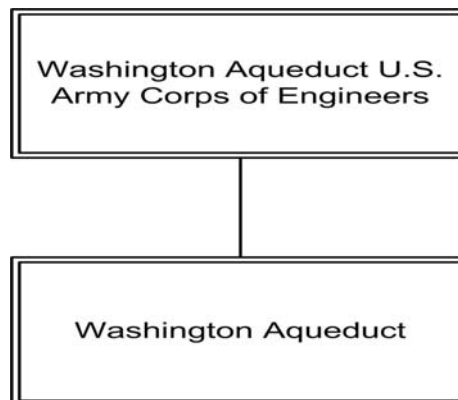
Table LB0-2

FY 2005 Proposed Operating Budget, by Comptroller Source Group

(dollars in thousands)

Comptroller Source Group	Actual FY 2002	Actual FY 2003	Approved FY 2004	Proposed FY 2005	Change from FY 2004	Percent Change
50 Subsidies And Transfers	0	0	55,553	46,872	-8,681	-15.6
Subtotal Nonpersonal Services (NPS)	0	0	55,553	46,872	-8,681	-15.6
Total Proposed Operating Budget	0	0	55,553	46,872	-8,681	-15.6

Figure LB0-1



Prior to the fall of 2000, the treatment consisted of chemically induced sedimentation using aluminum sulfate as the coagulant; filtration in dual media sand and anthracite coal filters; and disinfection using chlorine as the primary and secondary disinfectant. Beginning in November 2000, the Washington Aqueduct switched from using free chlorine as the residual disinfectant in the distribution system and instead introduced chloramines, a combination of chlorine and ammonia. The change was an effort to ensure that Aqueduct's customer distribution systems would be in compliance with the new EPA regulations concerning disinfection by-products. Use of free chlorine as the residual disinfectant was no longer considered feasible because it would create concentrations of disinfection by-products that exceeded the EPA maximum contaminate level.

In the summer of 2002, it was determined that from samples taken in accordance with the Lead and Copper Rule at D.C. Water and Sewer Authority (WASA) customers taps was above the action level specified by the Environmental Protection Agency (EPA). The high content of lead in the sampled water triggered new operating and capital requirements for WASA, including distribution of public education materials and a program of annual replacement of lead service lines until the action level for lead drops below EPA standards.

Washington Aqueduct officials announced in early 2004 that they will submit to EPA for approval a new treatment technique that will reoptimize optimum corrosion control treatment. Partial system application will begin in June 2004 and full system application in September 2004. This treatment requires introducing phosphates into the water, which is expected to reduce the leaching of lead from service lines and bring the distribution system back below the action level for lead.

In 2004, the Aqueduct fully committed itself to work with the EPA, WASA, and the District of Columbia Department of Health to quickly and safely reduce the corrosivity of the water and formed a technical expert-working group comprised of teams to address the water treatment process, the distribution systems, and the communication of potential risks to the public.

Gross Funds

The proposed budget is \$46,872,000, representing a change of 15.6 percent from the FY 2004 approved budget of \$55,553,000. There are no District FTEs for the agency, unchanged from FY 2004.

General Fund

Special Purpose Revenue Funds. The proposed budget is \$46,872,000 in representing a decrease of 15.6 percent from the FY 2004 approved Special Purpose Revenue budget of \$55,553,000. There are no District FTEs for the agency, unchanged from FY 2004.

Programs

Water Supply. The agency sells water to three wholesale customers: the District's Water and Sewer Authority (WASA); Arlington County; and the city of Falls Church, Virginia. The aqueduct is managed by the U.S. Army Corps of Engineers and governed by a Wholesale Customer Board represented by the three jurisdictions. The Wholesale Board also approves the aqueduct's budget. During FY 2005, the agency will pump an estimated 62 billion gallons of purified water to its customers.

Agency Goals and Performance Measures

Goal 1: Provide an adequate supply of potable water

Citywide Strategic Priority Area(s): Building Safer Neighborhoods; Making Government.

Manager(s): Lloyd D. Stowe, Chief, Plant Operations, Washington Aqueduct, U.S. Army Corps of Engineers

Supervisor(s): Thomas P. Jacobus, Chief, Washington Aqueduct, U.S.

Measure 1.1: Number of days water is provided as demanded by Washington, DC

	Fiscal Year				
	2002	2003	2004	2005	2006
Target	N/A	-	365	365	365
Actual	N/A	N/A	-	-	-

Note: New measure for FY 2004.

Measure 1.2: Number of days water is provided as demanded by Arlington County, VA

	2002	2003	Fiscal Year 2004	2005	2006
Target	N/A	-	365	365	365
Actual	N/A	N/A	-	-	-

Note: New measure for FY 2004.

Measure 1.3: Number of days water is provided as demanded by Falls Church, VA

	2002	2003	Fiscal Year 2004	2005	2006
Target	N/A	-	365	365	365
Actual	N/A	N/A	-	-	-

Note: New measure for FY 2004.

Measure 1.4: Days Average Filtered Water Turbidity is less than .1 NTU

	2002	2003	Fiscal Year 2004	2005	2006
Target	N/A	-	346	346	346
Actual	N/A	N/A	-	-	-

Note: New measure for FY 2004.

Goal 2: Protect the drinking water consumer from both microbial risk and adverse health effects due to chemicals in the drinking water

Citywide Strategic Priority Area(s): Building Safer Neighborhoods; Making Government Work
Manager(s): Elizabeth Turner, Chief, Laboratory Section, Washington Aqueduct, U.S.

Army Corps of Engineers

Supervisor(s): Thomas P. Jacobus, Chief, Washington Aqueduct, U.S. Army Corps of Engineers

Measure 2.1: Percentage of treated water samples in compliance with regulatory

	2002	2003	Fiscal Year 2004	2005	2006
Target	N/A	-	100	100	100
Actual	N/A	N/A	-	-	-

Note: New measure for FY 2004.

Measure 2.2: Number of chemical substances investigated for presence in the water supply system-wide

	2002	2003	Fiscal Year 2004	2005	2006
Target	178	181	163	163	163
Actual	180	181	-	-	-

Note: FY 2004 and 2005 targets decreased from 181 to 163 at the request of the agency (1/04). FY 2006 target decreased from 182 to 163 at the request of the agency

Measure 2.3: Number of months per year EPA water quality report is completed by the tenth of the month

	2002	2003	Fiscal Year 2004	2005	2006
Target	N/A	-	10	10	10
Actual	N/A	N/A	-	-	-

Note: New measure for FY 2004.

Measure 2.4: Number of months per year required bacteriological samples are analyzed within holding times and with appropriate quality control

	2002	2003	Fiscal Year 2004	2005	2006
Target	N/A	-	12	12	12
Actual	N/A	N/A	-	-	-

Note: New measure for FY 2004.

Measure 2.5: Number of months per year required chemical samples are analyzed within holding times and with appropriate quality control

	2002	2003	Fiscal Year 2004	2005	2006
Target	N/A	-	12	12	12
Actual	N/A	N/A	-	-	-

Note: New measure for FY 2004.